

Environmental Profile

This LCA is calculated according to: ISO 14044, ISO 14040 and EN 15804

Ecochain v3.5.64



Product: 3076857 - Wavin RIB PP Pipe BR 315 SN8 L=6 S/PL
Unit: 1 Piece
Manufacturer: Wavin - SE - Eskilstuna

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 20-06-2022
End of validity: 20-06-2027
Verifier: Harry van Ewijk - SGS Search



This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard.

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - SE - Eskilstuna (2020). (☑ = module declared, MND = module not declared).

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
☑	☑	☑	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	☑	☑	☑	☑
Product stage					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage					Benefits and loads beyond the system boundaries											
A4 Transport gate to site A5 Assembly / Construction installation process					D Reuse- Recovery- Recycling- potential											

Environmental impacts and parameters

GWP-total = EF Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF Climate Change - Land use and LU change [kg CO2 eq]; **ODP** = EF Ozone depletion [kg CFC11 eq]; **AP** = EF Acidification [mol H+ eq]; **EP-fw** = EF Eutrophication, freshwater [kg P eq]; **EP-m** = EF Eutrophication, marine [kg N eq]; **EP-T** = EF Eutrophication, terrestrial [mol N eq]; **POCP** = EF Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **WDP** = EF Water use [m3 depriv.]; **PM** = EF Particulate matter [disease inc.]; **IR** = EF Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF Human toxicity, cancer [CTUh]; **HTP-nc** = EF Human toxicity, non-cancer [CTUh]; **SQP** = EF Land use [Pt]; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total energy [MJ]; **SM** = Use of secondary material [kg]; **RSF** = Use of renewable secondary fuels [MJ]; **NRSF** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.71E+1	5.74E+0	1.98E+0	6.48E+1	7.82E-1	2.59E+1	3.68E-1	-3.63E+1	5.56E+1
GWP-f	kg CO2 eq	6.01E+1	5.74E+0	1.43E+0	6.73E+1	7.81E-1	2.27E+1	3.68E-1	-3.62E+1	5.50E+1
GWP-b	kg CO2 eq	-3.01E+0	2.60E-3	3.77E-1	-2.63E+0	4.75E-4	3.24E+0	3.21E-4	-1.27E-1	4.87E-1
GWP-luluc	kg CO2 eq	1.70E-2	2.12E-3	1.67E-1	1.86E-1	2.77E-4	4.39E-3	6.25E-6	-7.01E-3	1.84E-1
ODP	kg CFC11 eq	1.14E-6	1.27E-6	1.62E-7	2.57E-6	1.80E-7	5.70E-7	9.24E-9	-1.34E-6	2.00E-6
AP	mol H+ eq	2.15E-1	3.52E-2	1.21E-2	2.62E-1	4.45E-3	2.40E-2	2.20E-4	-1.02E-1	1.89E-1
EP-fw	kg P eq	8.87E-4	5.74E-5	2.65E-5	9.71E-4	6.43E-6	1.27E-4	2.87E-7	-3.99E-4	7.05E-4
EP-m	kg N eq	3.61E-2	1.22E-2	3.60E-3	5.19E-2	1.59E-3	6.96E-3	1.44E-4	-1.80E-2	4.26E-2
EP-T	mol N eq	4.07E-1	1.34E-1	3.95E-2	5.81E-1	1.76E-2	7.66E-2	8.95E-4	-1.99E-1	4.77E-1
POCP	kg NMVOC eq	1.88E-1	3.81E-2	1.10E-2	2.37E-1	5.02E-3	2.42E-2	3.36E-4	-9.19E-2	1.74E-1
ADP-mm	kg Sb eq	8.13E-4	1.44E-4	4.31E-5	1.00E-3	2.02E-5	9.50E-5	2.22E-7	-2.40E-4	8.76E-4
ADP-f	MJ	2.14E+3	8.64E+1	1.42E+1	2.24E+3	1.20E+1	7.61E+1	6.74E-1	-1.14E+3	1.18E+3
WDP	m3 depriv.	4.20E+1	3.07E-1	9.18E+0	5.15E+1	3.68E-2	1.49E+0	3.36E-3	-1.98E+1	3.32E+1
PM	disease inc.	1.92E-6	5.11E-7	2.05E-7	2.64E-6	7.05E-8	3.95E-7	4.64E-9	-8.52E-7	2.25E-6
IR	kBq U-235 eq	1.11E+0	3.62E-1	4.24E-2	1.51E+0	5.24E-2	2.29E-1	3.13E-3	-5.30E-1	1.27E+0
ETP-fw	CTUe	3.25E+2	7.68E+1	3.97E+1	4.41E+2	9.74E+0	8.58E+1	5.64E-1	-1.41E+2	3.96E+2
HTP-c	CTUh	1.50E-8	2.51E-9	1.57E-9	1.91E-8	3.47E-10	1.03E-8	1.64E-11	-6.03E-9	2.38E-8
HTP-nc	CTUh	3.93E-7	8.38E-8	4.28E-8	5.20E-7	1.16E-8	1.28E-7	3.63E-10	-1.71E-7	4.89E-7
SQP	Pt	3.48E+2	7.43E+1	1.87E+0	4.24E+2	1.03E+1	6.08E+1	1.73E+0	-3.06E+1	4.66E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.79E+1	1.08E+0	8.99E+1	1.69E+2	1.72E-1	3.75E+0	2.61E-2	-1.42E+1	1.59E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.79E+1	1.08E+0	8.99E+1	1.69E+2	1.72E-1	3.75E+0	2.61E-2	-1.42E+1	1.59E+2
PENRE	MJ	2.29E+3	9.17E+1	1.51E+1	2.40E+3	1.27E+1	8.11E+1	7.16E-1	-1.23E+3	1.26E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.29E+3	9.17E+1	1.51E+1	2.40E+3	1.27E+1	8.11E+1	7.16E-1	-1.23E+3	1.26E+3
PET	MJ	2.37E+3	9.28E+1	1.05E+2	2.57E+3	1.29E+1	8.48E+1	7.42E-1	-1.25E+3	1.42E+3
SM	kg	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m3	6.30E-1	1.05E-2	2.18E-1	8.59E-1	1.36E-3	4.39E-2	8.32E-4	-2.96E-1	6.09E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.73E-4	2.17E-4	2.17E-5	5.12E-4	3.07E-5	1.24E-4	8.12E-7	-2.62E-4	4.04E-4
NHWD	kg	2.52E+0	5.42E+0	6.65E-2	8.01E+0	7.43E-1	3.73E+0	2.97E+0	-8.79E-1	1.46E+1
RWD	kg	9.72E-4	5.68E-4	6.03E-5	1.60E-3	8.16E-5	2.90E-4	4.40E-6	-4.77E-4	1.50E-3
CRU	kg	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0
EE	MJ	0	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777